

Permit¹

Environmental Protection Act 1994

Environmental authority EPPR04175616

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit¹ number: EPPR04175616

Environmental authority takes effect 4 August 2016.

The anniversary date of this environmental authority is 15 May. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Kabiri Resources Pty Ltd	3 Faulkner Circle Mosman Park, WA, 6012

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
Mining - EPM	EPM18084

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being,

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation



contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature

Jacob Toe
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

4/8/2016

Date

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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Schedule A – General Conditions

- A1** This environmental authority authorises environmental harm referred to in the conditions. Where there is no condition or this environmental authority is silent on a matter, the lack of a condition or silence does not authorise environmental harm.
- A2** Activities involving machinery may be carried out within 1km of a category A environmentally sensitive area or within 500m of category B environmentally sensitive area. Prior to carrying out activities in a category C environmentally sensitive area, consult with the relevant administering authority. If it is determined through the consultation that additional conditions are necessary, the holder must comply with those conditions.
- A3** Aside from the activities authorised under Conditions A4 to A6, the holder of the environmental authority must not carry out activities in a category A or B environmentally sensitive area.
- A4** The holder of the environmental authority may only carry out activities in a category B environmentally sensitive area in the locations depicted in Figure 1 and described in Schedule A – Table 1 - Category B Environmentally Sensitive Area Permitted Disturbance.

Schedule A – Table 1 – Category B Environmentally Sensitive Area Permitted Disturbance

Description	Easting (GDA94)	Northing (GDA94)	Disturbance
Dronfield work area			
Proposed Hole 1	TBA ¹	TBA ¹	Drill pad no greater than 20m by 15m. Access road no greater than 30m long by 5m wide.
Proposed Hole 2	TBA ¹	TBA ¹	Drill pad no greater than 20m by 15m. Access road no greater than 30m long by 5m wide.
Proposed Hole 3	TBA ¹	TBA ¹	Drill pad no greater than 20m by 15m. Access road no greater than 30m long by 5m wide.

1. Locations to be provided to the administering authority prior to exploration activities being undertaken.

- A5** Any disturbance within the areas outlined in Schedule A – Table 1 are not to:
- Exceed a total disturbance area of 0.25ha;
 - Damage or destroy any mature trees with a trunk diameter of greater than 25cm
- A6** Any disturbance within the areas depicted in Schedule G – Figure 1 and described in Schedule A – Table 1 are not to impact adversely on surrounding category A or B environmentally sensitive area.
- A7** The mining activity must not, at any one time, cause more than 10ha of land to be significantly disturbed.
- A8** The holder of the environmental authority must ensure that the area and duration of disturbance to land and vegetation is minimised. Not more than 1,000m² can be disturbed at any one location, excluding campsites.
- A9** The holder of this environmental authority must:
- install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority
 - maintain such measures, plant and equipment in a proper and efficient condition
 - operate such measures, plant and equipment in a proper and efficient manner
 - ensure all instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority are properly calibrated.
- A10** All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities.

- A11** The holder of the environmental authority must record and notify the administering authority of any emergency or incident which demonstrates non-compliance with conditions of this environmental authority.

Financial assurance

- A12** Financial assurance must be lodged with the administering authority in the amount, the form and within the time required by the administering authority.

Notification of emergencies, incidents and exceptions

- A13** The holder of this environmental authority must notify the administering authority by written notification within 24 hours, after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with, the conditions of this environmental authority.
- A14** Within 10 business days following the initial notification of an emergency or incident, or receipt of monitoring results, whichever is the latter, further written advice must be provided to the administering authority, including the following:
- a) results and interpretation of any samples taken and analysed
 - b) outcomes of actions taken at the time to prevent or minimise unlawful environmental harm
 - c) proposed actions to prevent a recurrence of the emergency or incident.

Complaints

- A15** The holder of this environmental authority must record all environmental complaints received about the mining activities including:
- a) name, address and contact number for of the complainant
 - b) time and date of complaint
 - c) reasons for the complaint
 - d) investigations undertaken
 - e) conclusions formed
 - f) actions taken to resolve the complaint
 - g) any abatement measures implemented
 - h) person responsible for resolving the complaint.
- A16** The holder of this environmental authority must, when requested by the administering authority, undertake relevant specified monitoring within a reasonable timeframe nominated or agreed to by the administering authority to investigate any complaint of environmental harm. The results of the investigation (including an analysis and interpretation of the monitoring results) and abatement measures, where implemented, must be provided to the administering authority within 10 business days of completion of the investigation, or no later than 10 business days after the end of the timeframe nominated by the administering authority to undertake the investigation.
- A17** Where a condition of this environmental authority requires compliance with a standard, policy or guideline published externally to this environmental authority and the standard is amended or changed subsequent to the issue of this environmental authority, the holder of this environmental authority must:
- a) comply with the amended or changed standard, policy or guideline within two years of the amendment or change being made, unless a different period is specified in the amended standard or relevant legislation; and
 - b) until compliance with the amended or changed standard, policy or guideline is achieved, continue to remain in compliance with the corresponding provision that was current immediately prior to the relevant amendment or change.

END OF SCHEDULE A

Schedule B – Air

- B1** Odours or airborne contaminants must not cause **environmental harm** to any **sensitive place** or **commercial place**.

END OF SCHEDULE B

Schedule C - Noise

- C1** Noise generated by the **activity** must not cause **environmental harm** to any **sensitive place** or **commercial place**.

END OF SCHEDULE C

Schedule D - Land and rehabilitation

- D1** The holder of the environmental authority must plan and conduct activities on site to prevent any potential or actual release of a hazardous contaminant.
- D2** The holder of the environmental authority must ensure that spills of hazardous contaminants are cleaned up as quickly as practicable. Such spillage must not be cleaned up by hosing, sweeping or otherwise releasing such contaminants to any watercourse, waterway, groundwater, wetland or lake.
- D3** The holder of the environmental authority must, where practical, separate acid producing waste rock from benign waste rock.
- D4** The holder of the environmental authority must dispose of acid producing waste rock in an excavation or pit and backfill as soon as practical. Backfill the excavation or pit containing acid producing waste rock with benign, low permeability material and seal the excavation or pit with a compacted capping layer at least 1m thick.
- D5** The holder of the environmental authority must prevent the spread of Declared Plants by ensuring that all vehicles and machinery are adequately cleaned before taking the vehicles and machinery out of a Declared Plant Area.
- D6** The holder of the environmental authority must not carry out activities within 100m of a Historical, Archaeological or Ethnographic site.
- D7** The holder of the environmental authority must consult with the landowner prior to establishing any new roads and tracks.
- D8** When constructing new roads and tracks, the holder of the environmental authority must ensure that the area and duration of disturbance to land, vegetation and watercourses is minimised.
- D9** When drilling, excavating or sampling, the holder of the environmental authority must ensure that the area and duration of disturbance to land and vegetation is minimised.
- D10** The holder of the environmental authority must not drill, excavate or clear vegetation:
- a) in standing waters, wetlands or lakes; or
 - b) on the sloped banks or within 3m of the top of the bank or 5m of the toe of the bank; or
 - c) within, or on the levee banks of the normal flow channel.
- D11** The holder of the environmental authority must decommission all non-artesian drill holes, apart from those still required for monitoring purposes as soon as practical, but no later than 6 months after the hole was drilled by undertaking the following actions:
- a) where practical dispose of all unused drill chips to the hole or to a sump pit and;
 - b) cap the hole at a depth that is appropriate for the previous land use of the area (unless the land owner stipulates a future use which requires the cap to be placed deeper); and
 - c) backfill the hole above the cap with soil or material similar to the surrounding soil or material.
- D12** The holder of the environmental authority must isolate non-artesian aquifers where a drill hole intersects more than one water bearing strata by casing or plugging the hole as soon as practical after the hole is no longer required, but no later than 2 months after the hole was drilled, apart from those holes that are still required for monitoring purposes if:
- a) the flow difference between aquifers exceeds 500 L/hour; and
 - b) the difference in electrical conductivity of water is greater than 10% of the lower value.
- D13** The holder of the environmental authority must ensure that exploration drill holes that strike artesian flows of water that exceeds 500 L/hour for seven days must be either:
1. decommissioned as soon as practical, but no later than 1 month after the hole was drilled, apart from holes that are still required for monitoring or evaluation purposes. Refer to Report No. SW4 – "Minimum Construction Requirements for Water Bores in Australia", (ARMCANZ 1997); or

2. capped to allow for future conversion into a controlled artesian bore by a licensed water bore driller; or
 3. converted into a controlled artesian bore by a licensed water bore driller, provided that:
 - a) the land owner has undertaken in writing to accept responsibility for the drill hole; and
 - b) the explorer provides details of the agreement and the drill hole to the Department of Natural Resources and Mines within 30 days of obtaining the landowner's agreement.
- D14** The holder of the environmental authority must ensure that exploration drill holes that are to be retained for future mineral resource evaluation purposes are cased and capped. Holes to be retained for more than three years must be capped with steel casing and appropriately identified.
- D15** The holder of the environmental authority must plan and determine the final position of gridlines and geophysical lines in consultation with the landowner.
- D16** In Riverine Areas, the holder of the environmental authority must complete the Rehabilitation Processes on all areas disturbed by mining activities, apart from those areas currently being utilised for mining activities, as soon as practical and prior to the onset of the wet season.
- D17** For all other areas on the mining tenement, the holder of the environmental authority must complete the rehabilitation processes on all areas disturbed by mining activities, apart from those areas currently being utilised for mining activities, as soon as practical and at least within six months of the completion of works in those areas.
- D18** The holder of the environmental authority must backfill all excavations, drill holes or sampling sites as soon as practical following the completion of exploration activities.
- D19** Condition D18 does not apply to any excavations, drill holes or sampling sites that are to remain after the completion of exploration activities, by agreement with the land owner.
- D20** The holder of the environmental authority must rehabilitate areas disturbed by mining activities to a stable landform similar to that of surrounding undisturbed areas.
- D21** The holder of the environmental authority must spread seeds or plant species that will promote vegetation of a similar species and density of cover to that of the surrounding undisturbed areas or vegetation that is appropriate for providing erosion control and stabilisation of the disturbed areas.
- D22** The holder of the environmental authority must complete rehabilitation of disturbed areas to the satisfaction of the administering authority.
- D23** All explosives, hazardous chemicals, corrosive substances, toxic substances, gases and dangerous goods should be stored and handled in accordance with the current Australian standard where such is applicable.
- D24** The holder of the environmental authority must conduct biannual monitoring of the rehabilitation of activities within Environmentally Sensitive Areas for a minimum of two years.
- D25** A flora and fauna impact assessment, prepared by a suitably qualified person, must be submitted to the administering authority prior to the clearing of any endangered regional ecosystem.
- D26** An environmental offset must be made in accordance with the *Environmental Offsets Act 2014* and *Queensland Environmental Offsets Policy*, where a significant residual impact occurs to a prescribed environmental matter.

END OF SCHEDULE D

Schedule E – Water

- E1** Contaminants must not be released directly or indirectly to any waters or groundwaters as a result of the authorised mining activities.

Stormwater and water sediment controls

- E2** The holder of the environmental authority must design, install and maintain adequate banks and/or diversion drains to minimise the potential for storm water runoff to enter disturbed areas.
- E3** The holder of the environmental authority must design, install and maintain adequate erosion and sediment control structures wherever necessary to prevent or minimise erosion of disturbed areas and the sedimentation of any watercourse, waterway, wetland or lake.

END OF SCHEDULE E

Schedule F - Definitions

Words and phrases used throughout this environmental authority are defined below. Where a definition for a term used in this environmental authority is not provided within this environmental authority, but is provided in the EP Act 1994 or subordinate legislation, the definition in the EP Act or subordinate legislation must be used.

'acid rock drainage' means any contaminated discharge emanating from a mining activity formed through a series of chemical and biological reactions, when geological strata is disturbed and exposed to oxygen and moisture.

'administering authority' is the agency that administers the environmental authority provisions under the *Environmental Protection Act 1994*.

'archaeological site' is a site that has physical evidence of the past, which has the potential to increase our knowledge of earlier human occupation, activities and events.

'artesian drill hole' is an exploration drill hole from which water freely flows at a rate of greater than 500 L/hour for at least 7 days after being drilled.

'banks' means the feature which confines major flows within a watercourse. They are steeper than a terrace and are generally of a slope greater than 1:1 on outer bends.

'bund' is:

- a) An earth mound or similar structure (e.g. a concrete block wall), whether impervious or not, constructed to contain spilled material (e.g. petrol, diesel, oil etc.); or
- b) a structure to prevent or reduce soil erosion.

'campsite' is the area encompassing any dwelling, amenities (e.g. toilet block, power generator), sewage or general waste disposal facility and includes the office area and vehicle parking areas associated with a temporary or permanent mining camp.

'chemical' means:

- a) an agricultural chemical product or veterinary chemical product within the meaning of the Agricultural and *Veterinary Chemicals Code Act 1994* (Commonwealth), or
- c) a dangerous good under the Australian Code for the Transport of Dangerous Goods by Road and Rail
- d) approved by the Australian Transport Council, or
- e) a lead hazardous substance within the meaning of the Workplace Health and Safety Regulation 1997, or
- f) a drug or poison in the Standard for the Uniform Scheduling of Drugs and Poisons prepared by the Australian Health Ministers' Advisory Council and published by the Commonwealth, or
- g) any substance used as, or intended for use as:
 - i. a pesticide, insecticide, fungicide, herbicide, rodenticide, nematocide, miticide, fumigant or related product, or
 - ii. a surface active agent, including, for example, soap or related detergent, or
 - iii. a paint solvent, pigment, dye, printing ink, industrial polish, adhesive, sealant, food additive,
 - iv. bleach, sanitiser, disinfectant, or biocide, or
 - v. a fertiliser for agricultural, horticultural or garden use, or
 - vi. a substance used for, or intended for use for mineral processing or treatment of metal, pulp and paper, textile, timber, water or wastewater, or
 - vii. manufacture of plastic or synthetic rubber.

'commercial place' means a workplace used as an office or for business or commercial purposes. which is not part of the mining activity and does not include employees' accommodation or public roads.

'disturbed' means any area that has had its natural state altered by the action or interference of carrying out an activity associated with the exploration project.

'ethnographic site' means an archaeological site of particular importance to the study of a cultural group.

'financial assurance' Means a security deposit, either cash or a bank guarantee, that is held by the administering authority to cover the potential:

- a) costs to rehabilitate areas disturbed by mining activities; and
- b) costs to restore property improvements disturbed by mining activities; and
- c) failure of the tenure holder to pay rents and royalties.

'historical site' refers to site containing objects from the past that allows the study of the way people lived and worked at that place in the past.

'holder', for a mining tenement, means a holder of the tenement under the *Mineral Resources Act 1989*, and the holder of the associated environmental authority under the *Environmental Protection Act 1994*.

'land' in the 'land schedule' of this document means land excluding waters and the atmosphere, that is, the term has a different meaning from the term as defined in the *Environmental Protection Act 1994*. For the purposes of the *Acts Interpretation Act 1954*, it is expressly noted that the term 'land' in this environmental authority relates to physical land and not to interests in land.

'minimise' is to reduce to the smallest possible amount or degree.

'natural flow' means the flow of water through waters caused by nature.

'non polluting' means having no adverse impacts upon the receiving environment.

'rehabilitation' the process of reshaping and revegetating land to restore it to a stable landform.

'release event' means a surface water discharge from mine affected water storages or contaminated areas on the licensed place.

'revegetation' is the re-establishment of vegetation of a species and density of cover similar to surrounding undisturbed areas or the landform that existed before mining activities on soil surfaces associated with the construction or rehabilitation of a watercourse diversion.

'self-sustaining' means not requiring on-going intervention and maintenance to maintain functional riverine processes and characteristics

'sensitive place' means:

- a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises, or
- b) a motel, hotel or hostel, or
- c) an educational institution, or
- d) a medical centre or hospital, or
- e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area, or
- f) a public park or gardens.

Note: The definition of 'sensitive place' and 'commercial place' is based on Schedule 1 of EPP Noise. That is, a sensitive place is inside or outside on a dwelling, library and educational institution, childcare or kindergarten, school or playground, hospital, surgery or other medical institution, commercial & retail activity, protected area or an area identified under a conservation plan under *Nature Conservation Act 1992* as a critical habitat or an area of major interest, marine park under *Marine Parks Act 2004*, park or garden that is outside of the mining lease and open to the public for the use other than for sport or organised entertainment. A commercial place is inside or outside a commercial or retail activity.

A mining camp (i.e., accommodation and ancillary facilities for mine employees or contractors or both, associated with the mine the subject of the environmental authority) is not a sensitive place for that mine or mining project, whether or not the mining camp is located within a mining tenement that is part of the mining project the subject of the environmental authority. For example, the mining camp might be located on neighbouring land owned or leased by the same company as one of the holders of the environmental authority for the mining project, or a related company. Accommodation for mine employees or contractors is a sensitive place if the land is held by a mining company or related company, and if occupation is restricted to the employees, contractors and their families for the particular mine or mines which are held by the same company or a related company.

For example, a township (occupied by the mine employees, contractors and their families for multiple mines that are held by different companies) would be a sensitive place, even if part or all of the township is constructed on land owned by one or more of the companies.

'Suitably qualified person' means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relating to the subject matter using the relevant protocols, standards, methods or literature.

'water' is defined under Schedule 4 of the *Water Act 2000*.

'watercourse' has the same meaning given in the *Water Act 2000*.

'waters' includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), storm water channel, storm water drain, and groundwater and any part thereof.

'wetland' areas of permanent or periodic/intermittent inundation, whether natural or artificial, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6m. Wetlands typically include areas such as lakes, swamps, marshes, estuaries or mudflats.

END OF SCHEDULE F

Schedule G – Maps

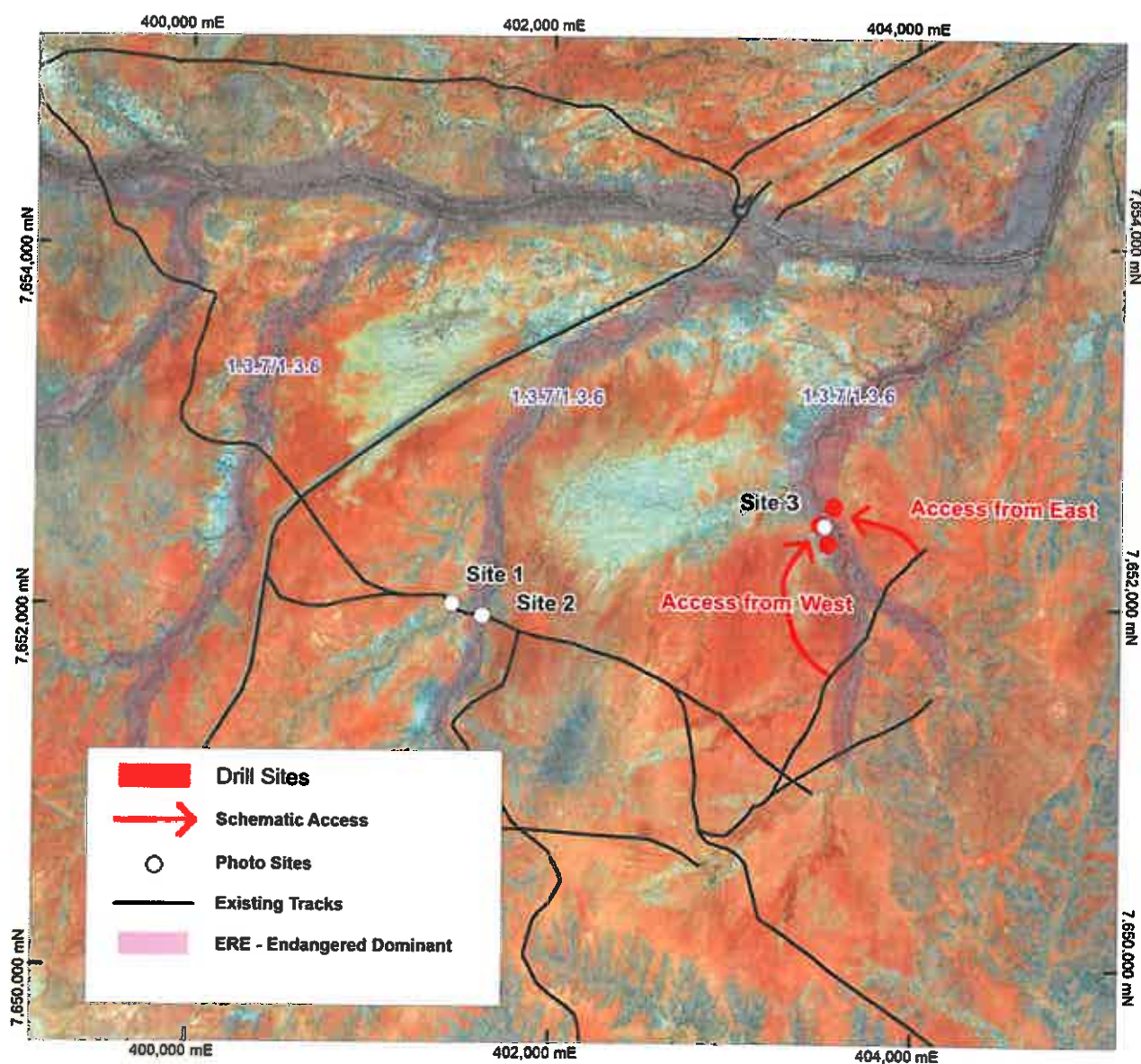


Figure 1. Location of proposed drill sites within "Dronfield Work Area".

END OF SCHEDULE G

END OF PERMIT